WHAT IS CLAIMED IS:

1. A method of tunneling any existing data, control-, or routing-related protocol through a generic Internet protocol (IP) transport, the method comprising:

first providing a generic messaging structure that includes at least a transport protocol, a message buffer, a source-address field and one or more data fields for transparent routing of a user protocol over the IP transport, and

second providing an application program interface to the generic messaging structure, the interface including a mechanism for a user to choose a desired transport and associated protocol for transparently routing the user protocol over the transport in accordance with the chosen transport protocol within the one or more data fields.

2. The method of claim 1 which further comprises:

creating a base class library including plural defined source and header files, and

third providing a mechanism for deriving a transaction-based protocol-specific class that is compatible with the base class library.

3. The method of claim 2, wherein the user protocol includes one or more headers followed by an integer number of tag-length-value (TLV) trios compliant with the user protocol.

4. The method of claim 3, wherein the message buffer includes message type and length fields.

5. A method of tunneling any related data-, control-, or routing-related protocol through a generic Internet protocol (IP) transport, the method comprising:

creating a base class library including plural defined source and header files, and

first providing a mechanism for deriving a transaction-based protocol-specific class that is compatible with the base class library.

6. The method of claim 5 which further comprises:

second providing a generic messaging structure that includes at least a transport protocol, a message buffer, a source-address field and one or more data fields for transparent routing of a user protocol over the IP transport, and

third providing an application program interface to the generic messaging structure, the interface including a mechanism for a user to choose a desired transport and associated protocol for transparently routing the user protocol over the transport in accordance with the chosen transport protocol within the one or more data fields.

7. The method of claim 6, wherein the user protocol includes one or more headers followed by an integer number of tag-length-value (TLV) trios compliant with the user protocol.

8. The method of claim 7, wherein the message buffer includes message type and length fields.

9. An application programming interface for transparently routing data between sockets in an Internet protocol (IP) transport, the interface comprising:

a message buffer data structure defining a protocol-generic parent class, message, source-address and data fields;

a message creation mechanism for creating a message and adding it to the message buffer data structure; and

a protocol creation mechanism for deriving a protocol-specific child class that renders new protocol-specific sub-fields of said protocol field of said message buffer data structure.

10. The interface of claim 9 in which the data to be routed represent a defined protocol, wherein said message includes one or more headers followed by an integer number of tag-length-value (TLV) trios compliant with the defined protocol.

11. The interface of claim 10, wherein said message buffer data structure further includes message type and length information.

12. The interface of claim 11, wherein said message creation and protocol creation mechanisms include computer-readable and computer-executable software instructions.

13. The interface of claim 12, which includes software source code and headers in C/C++ programming language form.

14. A computer-readable medium containing a program for tunneling a data-related protocol through a generic Internet protocol (IP) transport, the program comprising:

instructions for providing a generic messaging structure that includes at least a transport protocol, a message buffer, a source-address field and one or more data fields for transparent routing of a user protocol over the IP transport, and

instructions for providing an application program interface to the generic messaging structure, the interface including a mechanism for a user to choose a desired transport and associated protocol for transparently routing the user protocol over the transport in accordance with the chosen transport protocol within the one or more data fields.

15. The computer-readable medium in accordance with claim 14, which computer-readable medium further comprises:

instructions for creating a base class library including plural defined source and header files, and

instructions for providing a mechanism for deriving a transaction-based protocol-specific class that is compatible with the base class library.

16. A computer-readable medium containing a program for tunneling a data-related protocol through a generic Internet protocol (IP) transport, the program comprising:

instructions for creating a base class library including plural defined source and header files, and

instructions for providing a mechanism for deriving a transaction-based protocol-specific class that is compatible with the base class library.

17. The computer-readable medium in accordance with claim 16, which computer-readable medium further comprises:

instructions for providing a generic messaging structure that includes at least a transport protocol, a message buffer, a source-address field and one or more data fields for transparent routing of a user protocol over the IP transport, and

instructions for providing an application program interface to the generic messaging structure, the interface including a mechanism for a user to choose a desired transport and associated protocol for transparently routing the user protocol over the transport in accordance with the chosen transport protocol within the one or more data fields.